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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2405

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Ref: 8WM-C

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David P. Simonson, Acting Assistant
Manager for Environmental Management
Department of Energy
Rocky Flats Office
P.O. Box 928
Golden, Colorado 80402-0928

Re: NPDES Permit CO-0001333
US DOE Rocky Flats Plant

Dear Mr. Simonson:

This is in response to your August 20, 1990 letter transmitting BOD_5 and $CBOD_5$ data for the sewage treatment plant (Building 995) and Pond B-3 and a proposed plan for recycling water from Pond C-2. Our comments on those items are given below.

Comments on $BOD_5/CBOD_5$ Data:

1. The $CBOD_5$ data for the sewage treatment plant, if accurate, indicate that a consistent high level of treatment is being provided. In a telephone conversation with Bryan Janonis of RBD Inc., he indicated that the sewage treatment plant is capable of providing that high level of treatment.

2. The high percentage of the $CBOD_5$ values less than 2.5 mg/L tends to raise the question about the accuracy of the values. If not already being done, periodic checks should be made using standardized samples at low concentration ranges. It also would be a good idea to occasionally split samples with another laboratory as another check.

3. In drafting the renewal permit, we plan to replace BOD_5 limitations with limitations on $CBOD_5$, with the limitations effective at the point of discharge from the sewage treatment plant.

Comments on Proposed Recycle of Water From Pond C-2:

1. If water is to be recycled from Pond C-2 as proposed, it will be necessary to amend the NPDES permit application accordingly. This can be done in a letter.

ADMIN RECORD

2. The proposed recycling of water from Pond C-2 probably will not result in any additional NPDES monitoring requirements.

3. In the discussion of the proposed recycling, it was mentioned that the pumping would be stopped when the contents of the pond was reduced ten percent (10%) of capacity. The stated purpose was to avoid pumping of sediments from the bottom of the pond. However, it seems that if water is left in the pond, there is a potential for significant growths of algae. Will this present a problem in using the water in the cooling tower system?

4. The water balances shown in Charts 1 and 2 indicate there could be several months per year where the pond is more than half full. How will the proposed recycling project affect the use of the pond for emergency spill containment? This issue needs to be considered.

5. The column labeled Colorado Primary Drinking Water Regulations in Table 1, Comparative Water Quality Data, appears to have several errors. Of the parameters listed in Table 1, we only found gross alpha, gross beta; nitrate, VOC's and turbidity listed in the Colorado Primary Drinking Water Regulations adopted December 21, 1988. In the State's regulations, the gross beta limitation is 4 mrem/year. A gross beta value of less than 50 pCi/L is used as a criterion for not having to do additional monitoring. EPA has proposed an MCL of 3 ug/L for atrazine which should be promulgated soon. EPA has secondary drinking water standards (40 CFR 143) of 500 mg/L for TDS and 6.5-8.5 for pH. To our knowledge TSS, TOC, and BOD_5 are not covered under either Colorado's or EPA's drinking water regulations.

6. The cost figures of 1.5 and $2.5 million seems excessive for what appears to be a rather simple engineering/construction project.

If you have any questions about the above, please contact Bob Shankland at 293-1597 or Mike Reed at 293-1628.

Sincerely,

Steve A. Burkett, P.E., Chief
Compliance Branch
Water Management Division

cc: Jeb Love, CDH
Pat Nelson, CDH
Martin Hestmark, (8EWM-FF)